

Interpretive Challenges in a Medical History Museum

The Stetten Museum's First 10 Years

In 1987, the National Institutes of Health (NIH) established the DeWitt Stetten, Jr., Museum of Medical Research to preserve and interpret 20th-century biomedical technology. The vision behind the museum belonged to Hans Stetten, the senior science advisor to the NIH director, who lamented the loss of so much medical history to the government's surplus dump. In its first 10 years, the Stetten Museum faced the institutional challenges common to museums created by larger organizations. Yet unique to the Stetten Museum are the interpretive problems posed by a collection often viewed by the public as intimidating devices used by scientists who speak an unintelligible language.

The Stetten Museum mounts exhibits in the main-floor hallways of the Clinical Center, the research hospital on the NIH campus in Bethesda, Maryland. The population of this working hospital includes scientists, hospital staff, patients and their families, and visiting dignitaries. Because of this mixed audience, we strive to make our exhibits simple, but with enough technical detail to challenge scientists, physicians, nurses, and technicians.

The biggest hurdle we face in interpretation is our collection itself. There are very few "sexy" items in the collection. Most of our objects are instruments with little visual appeal. They are exciting not because of their beauty or provenance, but because of their impact on our health. Objects from the collection like spectrometers, centrifuges, and mercury purifiers are unfamiliar to most museum visitors. Even many of the more familiar objects need explanation: an early heart/lung machine, slide rules, microscopes, balances, an early CRAY supercomputer, and a positron emission tomography (PET) scanner. Thus, we must "speak" for our objects, informing the visitors why they are worth attention. Unlike a painting, which conveys a "thousand words," our objects need well-written labels to convey the excitement of medical discovery that they represent.

Health and medicine are relevant to everyone. Cancer, child development, mental health, aging, infectious diseases, genetic diseases, dental and eye diseases, and the mapping of the human genome are only some of the research conducted at NIH. Discoveries made at NIH, like the breaking of the genetic code, will influence our lives. Our challenge is to help the public appreciate the significance of the medical knowledge and practical applications generated at NIH.

The Stetten Museum tries to answer this question with exhibit development teams comprising the curator, exhibit designer, and scientific experts—often the actual people who used the objects to be exhibited. The curator's role on the development team is different from what it is in a more general museum because the curator cannot be a subject expert on every medical topic. Instead, the curator serves as the expert on how to create meaning for museum visitors. The team method impacts exhibit interpretation, particularly in the subject matter presented and the language used to present it, because the curator and the scientific experts must compromise their own voices in the exhibit. This process involves tension between scientists who seek accuracy and curators who strive for comprehensibility.

The Lazarow Micrometer Gasometer, from the collection of the Stetten Museum, extracted components of minute blood samples in the form of gas. Photo courtesy Stetten Museum.



The difference between how scientists and curators interpret medical history is clearly shown by the language they use. Scientists easily write articles explaining their work to colleagues. Sometimes these explanations are so technical that only scientists in the same field can understand them. The curator, on the other hand, wanting the average tenth-grader to understand the exhibit, must do two things. First, the curator diplomatically limits the length of the text. Often the exhibit team is a great help in this, with the designer and other scientists pointing out space and attention limitations. Scientists often do not realize that the visitor may not need or want to know every step in an investigation. Second, the curator must make sure the words are understandable. For example, which do you use to describe a disease-causing agent: "microbe" or "germ"? The scientist wanted "microbe" for accuracy; the curator chose "germ" for comprehensibility. In the end, the meaning of the text was changed and cited "germ theory." When Dr. Marshall Nirenberg, the Nobel Prize winner who broke the genetic code, was told that the word "oligoneucleotide" should not be used in a subtitle because people wouldn't know how to pronounce it, much less what it meant, he innocently asked, "They wouldn't?" People who have devoted their lives to science often forget the rest of the world does not share their technical knowledge.

One key question that arises within almost every new exhibit team is "What is history?" Each group comes at the question with different attitudes: the museum staff are historians, but many of the scientists admit to hating history in school because it was "all dates." They liked something

"more practical." This position, of course, rankles historians—what could be more practical than knowing how the present came out of the past? So we pose questions to the scientists: is something historical merely because it is old? If so, what is the cut-off date? How should we think about current endeavors such as the Human Genome Project to map our genes? If we create an exhibit based on recent history and current events, does that make it a public infor-

mation exhibit or an academic historical exhibit, or a little of both? Does it matter?

Usually the scientists and historians reach a consensus. The scientists realize that importance, not age, makes something historically valuable. They begin to see that history is not a story with a beginning, middle, and end, but an ongoing process. The line between history, current events, and future possibilities dissolves. Both scientists and museum staff usually agree that in our medical history museum, an exhibit without some historical context is a public information exhibit bound by today's understanding and outdated with the publication of new research. Nevertheless, we also realize that difficult scientific ideas often take much explaining. We have to make the exhibit as clear and simple as possible so that our general audience will understand the importance of the scientists' work.

As in other museums, our exhibits sometimes require a delicacy of interpretation. For example, our recent exhibit "Revolution in Progress: Human Genetics and Medical Research" describes some ethical issues raised by genetic research, particularly genetic testing, job and insurance discrimination, and genetic engineering of babies. The most difficult topic was pre-natal genetic testing because of one possible outcome of such testing: abortion. Abortion is perhaps the most highly politicized medical issue today. The exhibit team negotiated every word of this text, mindful of three caveats: we did not have security to deal with protesters; the exhibit would be seen by school children whose parents might not want them exposed to these issues; and as scientists and federal employees, the team members did not want to give the appearance of endorsing any particular moral decision. Instead, we wanted to stimulate the visitor's own thinking about the consequences of genetic research. With that in mind, we treated each issue in the ethics segment by outlining a situation and posing questions for the visitor to answer. For example, in the question about pre-natal testing of a fetus with a possible genetic disease, the word "abortion" was never mentioned.

In the past 10 years, the DeWitt Stetten, Jr., Museum of Medical Research has progressed from securing resources to refining its interpretation of NIH objects. During the next several years, NIH will construct a new Clinical Center with dedicated exhibit space in the new building. We look forward to the future with its opportunities for interpreting 20th-century biomedical research.

Michele Lyons is curator at DeWitt Stetten Jr. Museum of Medical Research.

Web site: <<http://nih.gov/ed/museum>>

This Servall Angle Centrifuge, now part of the Stetten Museum Collection, was a handy desk top model used for small samples. Photo courtesy Stetten Museum.

